



COMMONWEALTH OF MASSACHUSETTS  
EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
**Central Regional Office**, 627 Main Street, Worcester, MA 01608

DEVAL L. PATRICK  
Governor

TIMOTHY P. MURRAY  
Lieutenant Governor

IAN A. BOWLES  
Secretary

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Commissioner

## FINAL AIR QUALITY OPERATING PERMIT

Issued by the Massachusetts Department of Environmental Protection ("MassDEP") pursuant to its authority under M.G.L. c. 111, §142B and §142D, 310 CMR 7.00 et seq., and in accordance with the provisions of 310 CMR 7.00: Appendix C.

**ISSUED TO ["the Permittee"]:**

Upper Blackstone Water Pollution  
Abatement District  
50 Route 20  
Millbury, Massachusetts 01527

**INFORMATION RELIED UPON:**

Transmittal No. X226319 (Renewal)  
Tr. No. W061447 (Minor Modification)  
Tr. No. W059236 (Minor Modification)  
Tr. No. W031575 (prior Operating Permit)

**FACILITY LOCATION:**

Upper Blackstone Water Pollution  
Abatement District  
50 Route 20  
Millbury, MA 01527

**FACILITY IDENTIFYING NUMBERS:**

AQ ID: 118-0937  
FMF FAC NO. 132269  
FMF RO NO. 51582

**NATURE OF BUSINESS:**

Municipal Sewage Sludge Incineration

**STANDARD INDUSTRIAL CODE (SIC):**

4952

**N. AMERICAN INDUSTRY CLASSIFICATION  
SYSTEM (NAICS): 221320**

**RESPONSIBLE OFFICIAL:**

Name: Thomas K. Walsh  
Title: Engineer-Director-Treasurer

**FACILITY CONTACT PERSON:**

Name: Paul Caron  
Title: Plant Manager  
Phone: (508) 755-1286

**This operating permit shall expire on December 7, 2014.**

For the Department of Environmental Protection, Bureau of Waste Prevention

This final document copy is being provided to you electronically by the  
Department of Environmental Protection. A signed copy of this document  
is on file at the DEP office listed on the letterhead.

Thomas P. Cusson, Permit Chief

Date 12-08-2009



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## **SPECIAL CONDITIONS FOR OPERATING PERMIT**

A Legend to abbreviated terms found in the following Tables is located in Section 28 of the Operating Permit.

### **1. PERMITTED ACTIVITIES**

In accordance with the provisions of 310 CMR 7.00: Appendix C and applicable rules and regulations, the Permittee is authorized to operate air emission units as shown in Table 1 and exempt, and insignificant activities as described in 310 CMR 7.00:Appendix C(5)(h) and (i). The units described in Table 1 are subject to the terms and conditions shown in Sections 4, 5, and 6 and to other terms and conditions as specified in this permit. Emissions from the exempt activities shall be included in the total facility emissions for the emission-based portion of the fee calculation described in 310 CMR 4.00 and this permit.

### **DESCRIPTION OF FACILITY AND OPERATIONS**

The facility is a wastewater treatment plant. Wastewater sludge is incinerated in two multiple-hearth sewage sludge incinerators. Each incinerator exhaust is controlled by a pollution control train consisting of a venturi scrubber, a tray scrubber, a wet electrostatic precipitator (WESP), and a regenerative thermal oxidizer (RTO). The facility is subject to 40 CFR 64, the Compliance Assurance Monitoring (CAM) Rule for sulfur oxides, particulate matter and volatile organic compound emissions emitted from the scrubbers, WESPs and RTOs, respectively.

### **2. EMISSION UNIT IDENTIFICATION**

The following emission units (Table 1) are subject to and regulated by this operating permit:

<b>Table 1</b>			
<b>Emission Unit (EU#)</b>	<b>Description of Emission Unit</b>	<b>EU Design Capacity</b>	<b>Pollution Control Device (PCD)</b>
1	10 Hearth Envirotech Sludge Incinerator #1	3.0 dry tons/hour	Venturi scrubber, tray scrubber, either wet electrostatic precipitator (WESP #1 or WESP #2), and either regenerative thermal oxidizer (RTO #1 or RTO #2)
2	10 Hearth Envirotech Sludge Incinerator #3	3.0 dry tons/hour	Venturi scrubber, tray scrubber, either wet electrostatic precipitator (WESP #1 or WESP #2), and either regenerative thermal oxidizer (RTO #1 or RTO #2)
3	Smith Eng Thermal Oxidizer RTO #3	5.2 million BTU/hour	NA
4	Sludge tanks	n/a	Carbon filters
5	Screen Buildings, grit channels, wet weather grit channels and primary settling tank influent channel and effluent weirs	n/a	Biofilter

6	Fuel delivery system	1000 gallon gasoline AST	Submerged fill, Vapor balance (for tank filling), and Stage II vapor recovery (for dispensing system).
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### **3. IDENTIFICATION OF EXEMPT ACTIVITIES**

The following are considered exempt activities in accordance with the criteria contained in 310 CMR 7.00: Appendix C(5)(h):

<b>Table 2</b>	
<b>Description of Current Exempt Activities</b>	<b>Reason</b>
The list of current exempt activities is contained in the Operating Permit application and shall be updated by the Permittee to reflect changes at the facility over the permit term. An up-to-date copy of exempt activities list shall be kept on-site at the facility and a copy shall be submitted to the MassDEP's Regional Office. Emissions from these activities shall be reported on the annual emissions statement pursuant to 310 CMR 7.12.	310 CMR 7.00: Appendix C(5)(h)

### **4. APPLICABLE REQUIREMENTS**

#### **A. EMISSION LIMITS AND RESTRICTIONS**

The Permittee is subject to the emission limits/restrictions as contained in Table 3 below:

<b>Table 3</b>					
EU #	Fuel / Raw Material	Pollutant	Emissions Limit/Standard	Restrictions	Applicable Regulation and/or Approval No.
1, 2	Sewage Sludge, Natural Gas, #2 Fuel Oil	CO	$\leq 186$ ppmvd @7% O <sub>2</sub> <sup>*</sup> and 74 tpy <sup>1</sup>	1. The charge rate to any incinerator in service may not exceed 3.0 dry tons of sludge per hour. 2. Sludge feed to any incinerator shall not be started until its RTO has reached the minimum operating temperature of 1400 degrees F. 3. The auxiliary burners shall use natural gas as the primary fuel. #2 (distillate) fuel oil having a sulfur content not in excess of 0.05% by weight shall be available as backup fuel. 4. The total yearly charge rate of sludge shall not exceed 42,048 dry tons per year.	Plan Approval #W045973 40 CFR Part 61, Subpart C  40 CFR Part 61, Subpart E  40 CFR Part 60, Subpart O (NSPS)
		SO <sub>2</sub>	$\leq 16$ ppmvd @7% O <sub>2</sub> <sup>*</sup> and 35 tpy <sup>1</sup>		
		VOC	$\leq 36$ ppmvd @7% O <sub>2</sub> <sup>*</sup> and 23 tpy <sup>1</sup>		
		NOx	$\leq 162$ ppmvd @7% O <sub>2</sub> <sup>*</sup> and 105 tpy <sup>1</sup>		
		PM	$\leq 0.014$ gr/dscf <sup>*</sup> and 12 tpy <sup>1</sup> (Plan Approval)		
			$\leq 1.3$ lb/dry ton sludge (NSPS)		
		PB	$\leq 122$ ug/m <sup>3*</sup>		
		Visible Emissions	Shall not exceed 10% opacity (6-minute block average)		
		Be	Not to exceed 10 grams/24 hours		
		Hg	Not to exceed 3200 grams/24 hours		
3	Natural Gas, #2 Fuel Oil	Visible Emissions	10% opacity	EU#3 shall only be used for controlling odor from dewatering operations	Plan Approval #W045973
4	Sludge tank exhaust	H <sub>2</sub> S	$\leq 2.5$ ppmv	Min removal of 95% (at 20-50 ppm inlet)	Plan Approval #W037939
		DMS	$\leq 2.0$ ppmv	Min removal of 95% for dimethyl sulfide plus other organic compounds (at 10-40 ppm inlet)	
5	Various exhausts	H <sub>2</sub> S	$\leq 0.5$ ppmv	Minimum removal of 99% (at 2-6 ppm inlet)	
		DMS	$\leq 0.1$ ppmv	Min removal of 99% (at 0.25-0.75 ppm inlet)	
4 and 5	Various exhausts	Visible Emissions	$\leq 20\%$ opacity for two minutes during any hour, and at no time $\geq 40\%$		310 CMR 7.06(1)
6	OL (Pv > 1.5 psia <sup>2</sup> )	VOC/HAP	n/a	Minimize vapor emissions (see Special Conditions, Table 8 for specific requirements)	310 CMR 7.24

1. Tons per year = tons per twelve month rolling total \* One hour averaging period.
2. Organic liquid with a vapor pressure greater than 1.5 pounds per square inch absolute (such as gasoline).

## B. COMPLIANCE DEMONSTRATION

The Permittee is subject to the monitoring/testing, record keeping, and reporting requirements as contained in Tables 4, 4A, 4B, 4C, 5, and 6, below, and 310 CMR 7.00 Appendix C (9) and (10) and applicable requirements contained in Table 3:

Table 4	
EU #	MONITORING/TESTING REQUIREMENTS
EU1 and EU2	1) The following operating parameters shall be monitored continuously, in accordance with 40 CFR Part 60, Subpart O and Approval #W045973:
	<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;">A. Combined scrubber pressure drop</div> <div style="width: 30%;">C. Scrubber inlet and outlet gas temp</div> <div style="width: 30%;">E. Scrubber additive caustic feed rate</div> </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;">B. Exhaust gas oxygen content</div> <div style="width: 30%;">D. Scrubber water flow rate</div> <div style="width: 30%;">F. Scrubber effluent stream pH</div> </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"></div> <div style="width: 30%;"></div> <div style="width: 30%;">G. RTO operating temperature</div> </div>
	2) The sludge feed rate (pounds/hour, % dry solids, % volatiles) shall be monitored once every eight hours in accordance with 40 CFR 60, Subpart O and Approval #W045973.
	3) The scum feed rate shall be monitored volumetrically whenever scum is added to the sludge holding tanks, in accordance with 40 CFR 60, Subpart O and Approval #W045973.
	4) The auxiliary fuel feed (oil, gas) shall be monitored hourly in accordance with 40 CFR 60, Subpart O and Approval #W045973.
	5) The following exhaust gas parameters for the incinerators (EU#1 and EU#2) shall be continuously monitored by Continuous Emission Monitors (CEMs): Opacity, Nitrogen Dioxide, and Oxygen, in accordance with the quality control requirements of 40 CFR 60, Appendices B and F, and in accordance with Approval #W045973. The CEM reporting averaging times shall be as follows: Opacity - 6-minute block average NO <sub>2</sub> - 24-hour block average, parts per million by volume dry (ppmvd) O <sub>2</sub> - As required to calculate percent volume corrected to 7% O <sub>2</sub> Each CEM/COM and associated recording devices shall be operated at all times except for periods of CEM/COM calibration checks, zero and span adjustments, preventive maintenance, and periods of malfunction. Emission data from each CEM/COM shall be obtained and recorded for at least 90% of the emission unit operating hours per quarter and 75% of the unit operating hours per month, notwithstanding adjustments, maintenance or malfunctions. The CEM/COM systems are to be used by the District and MassDEP as “direct-compliance” monitors which generate data that legally documents the compliance status of the source.
	6) The Permittee shall conduct Emissions Compliance Testing (stack testing) in accordance with 310 CMR 7.13, MassDEP’s “Guidelines for Source Emissions Testing”, 40 CFR Part 60, Appendix A, and 40 CFR Part 60 Subpart O when MassDEP has determined that such stack testing is necessary to ascertain compliance with MassDEP’s regulations or design approval provisos. Such stack testing shall be: (a) conducted by a person knowledgeable in stack testing, and (b) conducted in accordance with procedures contained in a test protocol which has been approved by MassDEP, and (c) conducted in the presence of a representative of MassDEP when such is deemed necessary. Emissions testing shall be for Particulate Matter, Volatile Organic Compounds, Nitrogen Oxides (NO <sub>x</sub> ), Sulfur Dioxide (SO <sub>2</sub> ), Carbon Monoxide and Opacity. MassDEP may require testing for any pollutants if deemed necessary.
	7) Pursuant to 310 CMR 7.00: Appendix C(9)(b)2., the Permittee shall monitor the sulfur content of each new shipment of fuel received. Compliance with 310 CMR 7.05(1)(a) for sulfur content of the fuel can be demonstrated through fuel analysis. The analysis of sulfur content of the fuel shall be in accordance with the applicable American Society for Testing Materials (ASTM) test methods or any other method approved by MassDEP and the United States Environmental Protection Agency (EPA). Fuel sulfur information may be provided by fuel suppliers on the shipping receipt.
	8) In accordance with 310 CMR 7.00: Appendix C (9)(b) and 40 CFR 64 (CAM Rule), the Permittee shall comply with the requirements identified in Tables 4A, 4B and 4C.
EU4	9) In accordance with Plan Approval Tr.#W037939, monitor the carbon bed exhaust for hydrogen sulfide and dimethyl sulfide emissions. The carbon in the bed shall be sampled and analyzed for saturation two times per year. When analysis of a sample from

**Table 4**

EU #	MONITORING/TESTING REQUIREMENTS
	the upper sampling port first indicates saturation for oxidation of hydrogen sulfide or for adsorption of organics, carbon change-out should be scheduled. Once the plant operators gain experience and can estimate the rate of carbon consumption, the sampling and analysis schedule may be adjusted. If practical, carbon change-out should be scheduled during the winter months. Change-out of carbon will also be determined by the results of the hydrogen sulfide testing described in Plan Approval Tr.#W037939, VII.D. (and also in this Operating Permit, Table 4, condition 11). Once the hydrogen sulfide readings exceed the limits stated in Plan Approval Tr.#W037939 Section V (and also in Table 3 of this Operating Permit), a carbon change-out should be scheduled.
EU4 and 5	<p>10) In accordance with Plan Approval Tr. #W037939, to ensure effective odor control during warm weather months, both the biofilters and the carbon beds shall be tested by taking grab samples using portable hydrogen sulfide analyzer during the warm weather months. Testing shall be performed once a month from May through September.</p> <p>11) In accordance with Plan Approval Tr. #W037939 and 310 CMR 7.13, MassDEP may require testing for any pollutants if deemed necessary to ascertain the mass emission rates and relationship to equipment design and operation. The Permittee shall conduct stack testing when MassDEP has determined that such stack testing is necessary to ascertain compliance with MassDEP's regulations or design approval provisions. Such stack testing shall be:</p> <p>(a) conducted by a person knowledgeable in stack testing, and</p> <p>(b) conducted in accordance with procedures contained in a test protocol which has been approved by MassDEP, and</p> <p>(c) in the presence of a representative of MassDEP when such is deemed necessary in accordance with 310 CMR 7.13(1).</p> <p>(d) Emission testing to demonstrate compliance with emission limits specified in Plan Approval Tr. #W037939 shall be in accordance with EPA approved reference methods unless otherwise approved by EPA and MassDEP or unless otherwise specified.</p> <p>12) In accordance with Plan Approval Tr. #W037939, the biofilter and carbon adsorption systems shall be operated and maintained in accordance with the manufacturer's recommended Operation and Maintenance Management Plans.</p> <p>13) In accordance with Plan Approval Tr. #W037939, MassDEP at its discretion may require additional emission testing of the odor control systems to demonstrate their odor removal efficiency. Such testing shall be done in accordance with Plan Approval Tr. #W037939 Section VII and may include, in addition, odor panel testing and on property and off property odor surveys.</p> <p>14) Monitoring equipment or emission monitoring systems installed for the purpose of documenting compliance with Plan Approval Tr. #W037939 shall be installed, calibrated, maintained and operated by the Permittee in sufficient manner to ensure continuous and accurate operations at all times.</p> <p>15) In accordance with Plan Approval Tr. #W037939, The Permittee shall maintain whatever automatic recording devices are required by the approved monitoring plan referenced in Plan Approval Tr. #W037939, in an accurate operating condition.</p> <p>16) In accordance with Plan Approval Tr. #W037939, compliance with the allowable opacity limits shall be determined in accordance with EPA method 9, as specified in 40 CFR 60, Appendix A.</p>
EU6	<p>17) In accordance with 310 CMR 7.24(3)(f), maintain and properly operate the vapor balance system used for storage tank loading.</p> <p>18) In accordance with 310 CMR 7.24(3)(f), maintain all gauges, meters or other specified testing device in proper working order.</p> <p>19) In accordance with 310 CMR 7.24(6)(b)1., operate and maintain the Stage II system as required by the terms and conditions of the systems' currently applicable Executive Order.</p> <p>20) In accordance with 310 CMR 7.24(6)(b)1., take such actions as necessary to comply with the terms and conditions of any new or modified Executive Order upon MassDEP revision of 310 CMR 7.24(6) to incorporate such new or modified Executive Order. Such actions shall be taken within four years, or during applicable routine maintenance or modification, whichever occurs first.</p> <p>21) In accordance with 310 CMR 7.24(6)(b), once every seven days perform a visual inspection of the system components to determine if such components are installed, functioning and unbroken. Each inspection shall include: nozzle boots and splash/vapor guards; hoses; hose retractors; coaxial adaptors; dry breaks; fill caps and gaskets; vapor recovery caps and gaskets; spill containment boxes and drain valves. If during the visual inspection it is determined that a Stage II system component is incorrectly installed, non-functioning or broken, then immediately perform the actions identified in 7.24(6)(b)1.d. – f.</p> <p>22) In accordance with 310 CMR 7.24(6)(b)2., the required weekly visual inspection of the Stage II system shall be performed by a person who is trained to operate and maintain the Stage II system.</p> <p>23) In accordance with 310 CMR 7.24(6)(c), after a minor modification or major modification to the Stage II system appropriate compliance tests shall be performed and passed prior to commencing operation.</p> <p>24) In accordance with 310 CMR 7.24(6)(c) and (d), annually perform the appropriate compliance tests (as listed in 7.24(6)(d) 1., 2. and 3.) depending upon the type of Stage II unit installed, except as provided in 7.24(6)(c)4.</p>
Facility-wide	25) The Permittee shall monitor the operations of the entire facility such that necessary information is available for the preparation of the annual Source Registration/Emission Statement Forms as required by 310 CMR 7.12.

<b>TABLE 4A - Compliance Assurance Monitoring (CAM)</b> <b>Emission Unit # 1 and 2 - Sulfur Oxides control by Scrubber system *</b>	
Indicator	<b>Scrubber Exhaust Gas Temperature</b>
Measurement approach	For each scrubber, the scrubber exhaust gas temperature is continuously monitored with a thermocouple. An increased temperature is an indicator of reduced scrubber water flow rate.
Indicator range	A temperature reading greater than 100 degrees Fahrenheit. An excursion triggers shutdown of sewerage sludge feed and supplemental fuel to the incinerators via an interlock.
Performance criteria	Detector location: inlet to the induced draft fan (ID Fan)
A. Data Representativeness	Minimum accuracy: $\pm 4$ degrees Fahrenheit or $\pm 0.75$ percent, whichever is greater.
B. Operational Status Verification	Automated signal checks by SCADA system once per program scan or every 10 milliseconds.
C. QA/QC	Annual calibration to $\pm 0.1$ degrees Celsius or $\pm 0.75$ percent, whichever is greater.
D. Frequency of Monitoring	The scrubber exhaust gas temp, venturi scrubber differential pressure and total diff pressure (across both scrubbers) are measured continuously. The results are displayed on a central graphical display and are manually recorded on the "Incinerator Operating Log" every hour.

\* Note: Scrubber pressure drop is monitored in accordance with 40 CFR 60 Subpart O.

<b>TABLE 4B - Compliance Assurance Monitoring (CAM)</b> <b>Emission Units # 1 and 2 - Particulate Matter (PM) control at the ESP</b>		
Indicator	<b>Voltage</b>	<b>Spark Rate</b>
Measurement approach	For each wet ESP, voltage is continuously monitored using a voltmeter.	For each wet ESP, a spark rate meter is continuously monitored.
Indicator range	Above or below 25-110 kilovolts during normal operations, and zero kV for greater than three seconds. Zero kV for greater than three seconds triggers an audible alarm. All excursions trigger an inspection, corrective action and reporting requirements.	Above or below 10-60 sparks/minute during normal operations. All excursions trigger an inspection, corrective action and reporting requirements.
Performance criteria		
A. Data Representativeness	Detector location: at each transformer/rectifier. Minimum accuracy: $\pm 0.8$ kV	Detector location: at each section.
B. Operational Status Verification	Automated signal checks by SCADA system once per program scan or every 0.01 sec.	Automated signal checks by SCADA system once per program scan or every 0.01 sec.
C. QA/QC	Semi-annual check of 0 volts when ESP is not operating.	Calibrate and maintain in accordance with manufacturer's recommendations.
D. Frequency of Monitoring	The voltage is measured continuously. The results are displayed on a central graphical display. The results are averaged every minute and automatically recorded by the CEM DAHS and are manually recorded on the "Incinerator Operating Log" every hour.	The spark rate is measured continuously. The results are displayed on a central graphical display. The results are averaged every minute and automatically recorded by the CEM DAHS and are manually recorded on the "Incinerator Operating Log" every hr.

<b>TABLE 4C - Compliance Assurance Monitoring (CAM)</b> <b>Emission Unit # 1 and 2 - VOC control at the thermal oxidizer</b>	
Indicator	Carbon Monoxide (CO) CEMs
Measurement approach	For each RTO, CO is monitored using a Part 503 compliant CEMS
Indicator range	Below monthly limit 100 ppmvd CO, corrected to 7% oxygen
Performance Criteria	CO is a surrogate for VOC in this case since both are products of incomplete combustion

A. Data Representativeness B. Operational Status Verification C. QA/QC D. Frequency of Monitoring	 Data is recorded at least 75% of operating hr/month and 90% of operating hr/quarter. CEM Testing is performed every three months; Quarterly CGA's and an annual RATA. Readings every 6 seconds, recorded daily and archived for five years.
Table 5	
EU #	RECORD KEEPING REQUIREMENTS
1,	1) The Permittee shall maintain on site the following records for <b>five (5) years from the date of generation</b> and have the records readily available to MassDEP and EPA personnel in accordance with 310 CMR 7.00 Appendix C(10)(b): (a) Operating Logs – Logbooks shall be kept by the Permittee to accurately maintain the following records: 1. Hours of operation of each of the multiple hearth incinerators including start-ups and shutdowns. 2. Maintenance performed on the incinerator, emission controls, ash handling system, and all CEM/COM and other monitoring devices in sufficient detail to show that the equipment is being properly maintained. 3. All equipment malfunctions (time, date, reason, downtime, when restored, etc.) 4. All calibrations critical for the accurate and proper operation of all continuous emissions and other monitoring devices. 5. All operator training required for the proper operation of the incineration systems, (date(s), personnel attending, subject matter, certification received, etc.). 6. All facility fuel use and sludge solids throughput. 7. Such other operating records as required pursuant to 40 CFR Part 60, Subpart O. 8. Which incinerator is operating and which emission control equipment is serving each incinerator at all times. The Permittee shall record changes from one scenario to another contemporaneously with the change.
6	2) In accordance with 310 CMR 7.24(3)(f), maintain the following records for the vapor balance system: (a) Maintenance: all maintenance performed, including the type and date. (b) Malfunctions: all malfunctions, including the type, date observed and date repaired. (c) Fuel Throughput: daily fuel throughput of any organic material with a true vapor pressure of 1.5 psia or greater 3) In accordance with 310 CMR 7.24(6)(b)2. and 3., maintain the following records for the Stage II system: (a) Maintain a current list of all persons trained to operate and maintain the Stage II system including the date the training was last received, the trainee's printed name, and the personal signature of the trainee acknowledging the training. (b) Maintain the most recent twelve-month records on-site in a centralized location which shall include the following: 1. Maintenance: the facility's weekly inspection checklists containing the information required pursuant to 310 CMR 7.24(6)(b)3.a. 2. Testing: a copy of compliance test results for all Stage II compliance tests. 3. Annual Certification: a copy of the Stage II system's most recent Annual In-Use Compliance Certification. (c) The records shall be made available to MassDEP or EPA immediately upon request. If records are not immediately available, then the records shall be delivered to MassDEP or EPA within 24 hours of the initial request.
Facility Wide	4) In accordance with Plan Approval Tr. #W037939 and with 310 CMR 7.00 Appendix C(10)(b), the Permittee shall establish and maintain an up-to date record keeping system. All records shall be maintained for <b>five (5) years from the date of generation</b> and be readily available to MassDEP personnel and shall include, at a minimum: (a) Compliance records sufficient to demonstrate that emissions have not exceeded what are allowed by this approval. Such records may include daily production records, raw material usage rates, fuel receipts, emissions test results, monitoring data and reports. (b) Maintenance: A record of routine maintenance activities performed on emission unit, control and monitoring equipment including, at a minimum, the type or a description of the maintenance performed and the date/time the work was completed. (c) Malfunctions: A record of all malfunctions on emission unit, control equipment and monitoring equipment including, at a minimum: the date and time corrective actions were initiated; and the date and time corrective actions were completed and the emission unit returned to compliance 5) Plan Approval Application and Approval Letter – Pursuant to the authority granted to MassDEP at 310 CMR 7.02(7), the facility shall maintain a copy of this approval and associated plan approval application materials, any subsequent amendments, updated information or relevant material submitted as a requirement of this approval and any modifications of this approval, on-site for as long as the approval is valid. In accordance with 310 CMR 7.02(3)(l), the approval is valid until one of the following conditions occur: the equipment is dismantled or removed from the facility, the facility notifies MassDEP that the approval is no longer valid, the equipment is substantially reconstructed or altered and subject to 310 CMR 7.02, the approval is superseded by another approval, or MassDEP revokes the approval in accordance with 310 CMR 7.02(3)(k). 6) Operating and Maintenance Procedures – The facility shall maintain a copy of the approved Standard Operating Procedure (SOP)



and Standard Maintenance Procedure (SMP) on-site for as long as this approval is valid. Updates or revisions to the SOP and SMP shall be submitted for MassDEP approval prior to initiating the modification(s).

7) The Permittee shall maintain sufficient records of its operations and monitoring information for the annual preparation of a Source Registration/Emission Statement Form as required by 310 CMR 7.12 and shall keep copies of submitted forms for five years.

**Table 6**

EU#	REPORTING REQUIREMENTS
1, 2, & 3	<p>1) In accordance with Plan Approval Tr.#W045973, the Permittee shall provide notice of an emergency or malfunction that:</p> <ul style="list-style-type: none"> <li>(a) cause emissions to the ambient air that exceed any emission limits including noise limits contained herein; or</li> <li>(b) cause a condition of air pollution; or</li> <li>(c) any planned shutdown of equipment at the facility that directly results in emissions that exceed limits noted within this plan approval; or</li> <li>(d) any failure of monitoring equipment that last for longer than 24 hours; or</li> <li>(e) any planned shutdown of monitoring equipment at the facility that lasts or is expected to last for longer than 24 hours.</li> </ul> <p>2) In accordance with Plan Approval Tr.#W045973, notice of an emergency or malfunction shall be submitted to MassDEP of Environmental Protection, Central Regional Office, Bureau of Waste Prevention, Compliance &amp; Enforcement Section as soon as reasonably practical but no later than two (2) days of the emergency or malfunction and in writing within Ten (10) business days of the emergency or malfunction. The Permittee shall have the burden of establishing that the initial notice was provided as soon as reasonably practical in any subsequent enforcement action.</p> <p>3) In accordance with Plan Approval Tr.#W045973, the Permittee shall also notify the Board of Health in the Town of Millbury as soon as reasonably practical of the emergency or malfunction and shall copy the Board of any written notice made to MassDEP.</p> <p>4) In accordance with Plan Approval Tr.#W045973, the written notice must contain a description of the an emergency or malfunction, any steps taken to mitigate emissions, an estimate of the quantity of emissions released as a result of the emergency or malfunction and any corrective actions taken. The Permittee must comply with all notification procedures required under M.G.L. c. 21E, Spill Notification Regulations.</p> <p>5) In accordance with Plan Approval Tr.#W045973, an <b>"Emergency"</b> means any situation arising from sudden and reasonably unforeseeable events beyond the control of this source, including acts of God, which would require immediate corrective action to restore normal operation, and that causes the source to exceed a technology based limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operations, operator error, or decision to keep operating despite knowledge of these things.</p> <p>6) In accordance with Plan Approval Tr.#W045973, a <b>"Malfunction,"</b> means any sudden and unavoidable failure of air pollution control equipment or process equipment or of a process to operate in a normal or usual manner. Failures that are caused entirely or in part by poor maintenance, careless operation, or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.</p> <p>7) The reporting requirements of Plan Approval Tr. #W045973 for an emergency or malfunction do not supersede, limit, or make inapplicable any reporting obligation under federal law, including but not limited to 42 U.S.C. sections 9603 or 11004.</p>
4 and 5	8) In accordance with Plan Approval Tr. #W037939, the Permittee shall notify MassDEP as soon as reasonably practical by telephone or fax after the occurrence of any upsets or malfunctions (i.e., any piece of equipment or device breakdown that causes an excess emission) and in writing within two (2) business days of such event.
6	<p>9) In accordance with 310 CMR 7.24(6)(c)2., after installation or substantial modification of the Stage II system, report to MassDEP within seven days of performing and passing applicable compliance tests a fully completed and signed Installation/Substantial Modification Certification.</p> <p>10) In accordance with 310 CMR 7.24(6)(c), submit an Annual In-Use Compliance certification or an Alternative In-Use Compliance Certification.</p>

Facility Wide	11) In accordance with 310 CMR 7.12, the facility shall submit on an annual basis, a form obtained from MassDEP (Source Registration) which shall include, but is not limited to, the following information: (a) A description of the facility; (b) Detailed emission estimates for all criteria and hazardous air pollutants; (c) An Emission Statement for annual and peak day ozone season emissions; (d) A description of air pollution control equipment and control efficiencies; (e) Calculations and assumptions used to support calculations of emissions; (f) A certification of accuracy.
	12) In accordance with Plan Approval Tr.#W045973, the following shall be made readily available for inspection by MassDEP: (a) The 7.02 plan approval, Operating Permit and any amendments thereto; (b) A diagram of the facility indicating the location of all equipment and control apparatus, any stack designation assigned by MassDEP, and any stack designation assigned by the facility; (c) Records documenting any and all use of any equipment, control apparatus, or other source operation including, but not limited to, the kind and amount of air contaminant emitted, rate of production and hours of operation, raw material throughput; and (d) Records documenting any construction, substantial reconstruction, or alteration, including the dates thereof, of any equipment or control apparatus.
	13) The Permittee shall summarize and submit to MassDEP the results of stack testing as prescribed in MassDEP's approved pretest protocol, stack testing that was determined by MassDEP to be necessary to ascertain compliance with MassDEP's regulations or design approval provisions in accordance with 310 CMR 7.13(1) and 310 CMR 7.13(2).
	14) In accordance with 310 CMR 7.00 Appendix C(10)(a) and Plan Approval Tr.#W045973, upon MassDEP request, any records required by the applicable requirements identified in this permit, or the emissions of any air contaminant from the facility, shall be submitted to MassDEP within 30 days of the request by MassDEP, or within a longer time period if approved in writing by MassDEP. Said response shall be transmitted on paper, on computer disk, or electronically at the discretion of MassDEP.
	15) All required reports must be certified by a responsible official of the Permittee as provided in 310 CMR 7.01(2)(c).

### C. GENERAL APPLICABLE REQUIREMENTS

The permittee shall comply with all generally applicable requirements contained in 310 CMR 7.00 et seq. and 310 CMR 8.00 et seq., when subject.

### D. REQUIREMENTS NOT CURRENTLY APPLICABLE

The permittee is currently not subject to the following requirements:

Table 7	
REGULATION	DESCRIPTION
310 CMR 7.15	Asbestos
310 CMR Sec. 7.16	Reduction of Single Occupant Commuter Vehicle Use
310 CMR 7.25	Consumer & Commercial Products
310 CMR 7.22	Acid Rain
310 CMR 7.19	NO <sub>x</sub> RACT
310 CMR 7.18(2)-(7) and (8)-(29)	VOC/HOC RACT
42 U.S.C. 7401, §601 (40 CFR 82)	Protection of Stratospheric Ozone

42 U.S.C. 7401 §112(r)	Accidental Release Prevention Requirements
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## **5. SPECIAL TERMS AND CONDITIONS**

The Permittee is subject to the following special provisions that are not contained in Tables 3, 4, 5 and 6:

<b>Table 8</b>	
<b>SPECIAL TERMS AND CONDITIONS</b>	
EU1, 2	1) In accordance with Plan Approval Tr. No. W045973, the Permittee may operate the two sludge incinerator units simultaneously.
	2) In accordance with Plan Approval Tr. No. W045973, the charge rate to <u>each</u> individual sludge incinerator (EU #1 and EU#2) in service may not exceed 3.0 dry tons of sludge per hour.
	3) In accordance with Plan Approval Tr. #W045973, the charge rate to an individual sludge incinerator shall be reduced to a maximum of 1.9 dry tons per hour when the emission monitor system for that incinerator is in an "out of control period" as defined by 40 CFR 60, Appendix F or under repair.
	4) In accordance with Plan Approval Tr. #W045973, sludge feed to EU #1 or EU #2 shall not be started until the RTO serving the appropriate sludge incinerator has reached the min. operating temperature of 1400°F.
	5) In accordance with Plan Approval Tr. No. W045973, the sludge incinerators auxiliary burners shall use natural gas as the primary fuel. Distillate #2 fuel oil with a maximum sulfur content of 0.05% by weight may be used as a backup fuel.
	6) In accordance with Plan Approval Tr. No. W045973, MassDEP reserves the right to establish emission limits in the future for pollutants not listed in Tables 2 & 3 of Plan Approval Tr. #W045973.
	7) In accordance with Plan Approval Tr. No. W045973, the Permittee shall sample and analyze the sludge solids content in percent by weight once every eight hours during incinerator operation. The results are to be recorded and reported as delineated in Sections VII. (Monitoring and Record Keeping) and IX. (Reporting) of Plan Approval Transmittal No. W045973.
	8) In accordance with Plan Approval Tr. No. W045973, any bypassing of flue gas to the ambient environment without benefit of air pollution control is prohibited except under emergency conditions. Such bypassing shall be reported as specified in Plan Approval Tr. W045973, Section IX (Reporting).
	9) In accordance with Plan Approval Tr. No. W045973, emissions to the ambient air shall be exhausted through the existing stack. This stack consists of an existing steel shell with three flues. Exhaust from the Regenerative Thermal Oxidizers serving the incinerators may be emitted to ambient through either of two existing flues. Exhaust from emission unit #3 (the RTO used for odor control) has its own flue. The exit height of each flue shall remain at the current 125 feet above ground level. Each of the flue diameters at exit shall be maintained at 3.17 feet. The maximum redesigned exhaust gas flow rate that would exit through a single flue serving both EU #1 and EU#2 is 42,389 cubic feet per minute at 267 degrees Fahrenheit resulting in an exit velocity of 90 fps (two incinerators through one flue). Combustion air exhaust from EU #3 will be through its own associated flue.
	10) In accordance with Plan Approval Tr. No. W045973, the Permittee shall ensure that the facility is operated in accordance with the Standard Operating and Maintenance Procedures as submitted in the plan application and is operated by personnel properly trained in the use of the installed equipment. Modifications to the SOP and SMP shall be submitted to MassDEP, Central Region, Bureau of Waste Prevention, Permit Section, attention Section Chief within 90 days of startup of the new equipment.
	11) In accordance with Plan Approval Tr. No. W045973, the Permittee shall not cause exceedance of the Allowable Ambient Limits ("AALs") listed in Table 9, below.
	12) In accordance with Plan Approval Tr. No. W045973, the Permittee shall submit documentation to MassDEP that the CEM equipment has been certified by the Performance Specifications of 40 CFR 60 Appendix B.
EU4	13) In accordance with Plan Approval Tr. No. W037939, the carbon system shall have two separate beds capable of being used individually or together. Each carbon bed shall have the following minimum dimensions: depth of 3 feet, volume of 84.8 cubic feet.
	14) In accordance with Plan Approval Tr. No. W037939, the beds shall be rated at the following minimum removal efficiencies: 95% for hydrogen sulfide at 20-50 ppm inlet concentration; and 95% for dimethyl sulfide plus other organic compounds at 10-40 ppm inlet concentration.

<b>Table 8</b>	
<b>SPECIAL TERMS AND CONDITIONS</b>	
	<p>15) In accordance with Plan Approval Tr. No. W037939, the Permittee shall change the carbon beds when the break point of 2.5 ppm of hydrogen sulfide or dimethyl sulfide is reached as determined by the approved monitoring plan reference in Plan Approval Tr. No. W037939 item VII.C.</p> <p>16) In accordance with Plan Approval Tr. No. W037939, the Permittee shall replace spent carbon with fresh carbon as soon as possible after a break point is detected. Until carbon change-out occurs all exhaust shall be directed through the remaining carbon bed while the other is idle and awaiting change-out. Spent carbon shall be placed in leak tight containers and promptly sent off-site for proper recycling/regeneration or disposal.</p> <p>17) In accordance with Plan Approval Tr. No. W037939, the exhaust stack from the carbon beds shall have an exit height no less than 7 feet above ground level.</p>
5	<p>18) In accordance with Plan Approval Tr. No. W037939, the biofilters shall have an empty bed retention time of 25 seconds.</p> <p>19) In accordance with Plan Approval Tr. No. W037939, the inlet air to the biofilters shall be humidified to a minimum of 95%.</p> <p>20) In accordance with Plan Approval Tr. No. W037939, scheduled maintenance requiring temporary shut-down of the biofilters shall be done only between October and March.</p> <p>21) In accordance with Plan Approval Tr. No. W037939, the exhaust stack from the biofilters shall have an exit height no less than 10 feet above ground level.</p> <p>22) In accordance with Plan Approval Tr. No. W037939, biofilters media shall be replaced according to manufacturer's recommended schedule or more frequently if necessary to prevent excessive odor emissions.</p>
EU4 and 5	23) In accordance with Plan Approval Tr. No. W037939, odors shall not cause a condition of air pollution.
EU 6	<p>24) In accordance with 310 CMR 7.24(3)(a), motor vehicle fuel shall be transferred using submerged filling into tanks greater than 250 gallons but less than 40,000 gallons.</p> <p>25) In accordance with 310 CMR 7.24(3)(d), the transfer of motor vehicle fuel shall be processed using a vapor balance system for tanks greater than 250 gallons.</p> <p>26) In accordance with 310 CMR 7.24(3)(f), the facility shall install, maintain and operate the vapor balance system, gauges, meters and other specified testing devices in proper working order.</p> <p>27) In accordance with 310 CMR 7.24(6)(a)1., prior to commencing operation, the facility shall install a Stage II system on the motor vehicle dispensing facility as required by the terms and conditions of the system's Executive Order and any approval letters issued by CARB on or before March 1, 2009.</p> <p>28) In accordance with 310 CMR 7.24(6)(a)7., the facility shall install a pressure/vacuum vent cap in compliance with 7.24(6)(a)7. on aboveground storage tanks that use vacuum assist type Stage II systems.</p> <p>29) In accordance with 310 CMR 7.24(6)(a)5., the facility shall conspicuously post Stage II system operating instructions on both sides of all motor vehicle fuel dispensers or at a position adjacent to the dispensers that is clearly visible to the system operator during the refueling process. Such instructions shall include:</p> <ol style="list-style-type: none"> <li>a clear pictorial or written description of how to correctly dispense fuel using the installed Stage II system;</li> <li>a warning not to continue to dispense fuel after automatic system shutoff has engaged ("topping off"); and</li> <li>the telephone number of MassDEP's Stage II Consumer Hotline.</li> </ol>

Table 9 – AAL limits	
AAL Pollutants	AALs (micrograms per cubic meter)
Antimony (Sb)	1
Arsenic (As)	0.0002
Beryllium (Be)	0.0004
Cadmium (Cd)	0.001
Chromium (Cr)	0.68
Copper (Cu)	0.54
Lead (Pb)	0.07
Mercury (Hg)	0.07
Nickel (Ni)	0.18
Selenium (Se)	0.54
Vanadium (V)	0.27
Hydrogen Chloride (HCl)	7
Hydrogen Fluoride (HF)	0.34

## **6. ALTERNATIVE OPERATING SCENARIOS**

The permittee did not request alternative operating scenarios in its operating permit application.

## **7. EMISSIONS TRADING**

(a) Intra-facility emission trading

The facility did not request intra-facility emissions trading in its operating permit application.

(b) Inter-facility emission trading

The Permittee did not request inter-facility emissions trading in its operating permit application.

## **8. COMPLIANCE SCHEDULE**

The Permittee has indicated that the facility is in compliance and shall remain in compliance with the applicable requirements contained in Sections 4 and 5.

In addition, the Permittee shall comply with any applicable requirements that become effective during the permit term.

## **GENERAL CONDITIONS FOR OPERATING PERMIT**

### **9. FEES**

The permittee has paid the permit application processing fee and shall pay the annual compliance fee in accordance with the fee schedule pursuant to 310 CMR 4.00.

### **10. COMPLIANCE CERTIFICATION**

All documents submitted to the MassDEP shall contain certification by the responsible official of truth, accuracy, and completeness. Such certification shall be in compliance with 310 CMR 7.01(2) and contain the following language:

"I certify that I have personally examined the foregoing and am familiar with the information contained in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment."

The "Operating Permit Reporting Kit" contains instructions and the Annual Compliance Report and Certification and the Semi-Annual Monitoring Summary Report and Certification. The "Operating Permit Reporting Kit" is available to the Permittee via MassDEP's web site, <http://www.mass.gov/dep/air/approvals/aqforms.htm#op>.

#### **(a) Annual Compliance Report and Certification**

The Responsible Official shall certify, annually for the calendar year, that the facility is in compliance with the requirements of this permit. The report shall be postmarked or delivered by January 30 to the MassDEP and to the Regional Administrator, U.S. Environmental Protection Agency - New England Region. The report shall be submitted in compliance with the submission requirements below.

The compliance certification and report shall describe:

- i. the terms and conditions of the permit that are the basis of the certification;
- ii. the current compliance status and whether compliance was continuous or intermittent during the reporting period;
- iii. the methods used for determining compliance, including a description of the monitoring, record keeping, and reporting requirements and test methods; and
- iv. any additional information required by the MassDEP to determine the compliance status of the source.

#### **(b) Semi-Annual Monitoring Summary Report and Certification**

The Responsible Official shall certify, semi-annually on the calendar year, that the facility is in compliance with the requirements of this permit. The report shall be postmarked or delivered by January 30 and July 30 to the MassDEP. The report shall be submitted in compliance with the submission requirements below.

The compliance certification and report shall describe:

- i. the terms and conditions of the permit that are the basis of the certification;
- ii. the current compliance status during the reporting period;
- iii. the methods used for determining compliance, including a description of the monitoring, record keeping, and reporting requirements and test methods;
- iv. whether there were any deviations during the reporting period;
- v. if there are any outstanding deviations at the time of reporting, and the Corrective Action Plan to remedy said deviation;
- vi. whether deviations in the reporting period were previously reported;
- vii. if there are any outstanding deviations at the time of reporting, the proposed date of return to compliance;
- viii. if the deviations in the reporting period have returned to compliance and date of such return to compliance; and
- ix. any additional information required by the MassDEP to determine the compliance status of the source.

## **11. NONCOMPLIANCE**

Any noncompliance with a permit condition constitutes a violation of 310 CMR 7.00: Appendix C and the Clean Air Act, and is grounds for enforcement action, for permit termination or revocation, or for denial of an operating permit renewal application by the MassDEP and/or EPA. Noncompliance may also be grounds for assessment of administrative or civil penalties under M.G.L. c.21A, §16 and 310 CMR 5.00; and civil penalties under M.G.L. c.111, §142A and 142B. This permit does not relieve the permittee from the obligation to comply with any other provisions of 310 CMR 7.00 or the Act, or to obtain any other necessary authorizations from other governmental agencies, or to comply with all other applicable Federal, State, or Local rules and regulations, not addressed in this permit.

## **12. PERMIT SHIELD**

(a) This facility has a permit shield provided that it operates in compliance with the terms and conditions of this permit. Compliance with the terms and conditions of this permit shall be deemed compliance with all applicable requirements specifically identified in Sections 4, 5, 6, and 7, for the emission units as described in the permittee's application and as identified in this permit.

Where there is a conflict between the terms and conditions of this permit and any earlier approval or permit, the terms and conditions of this permit control.

(b) The MassDEP has determined that the permittee is not currently subject to the requirements listed in Section 4, Table 7.

(c) Nothing in this permit shall alter or affect the following:

- (i) the liability of the source for any violation of applicable requirements prior to or at the time of permit issuance.
- (ii) the applicable requirements of the Acid Rain Program, consistent with 42 U.S.C. §7401, §408(a);  
or
- (iii) the ability of EPA to obtain information under 42 U.S.C. §7401, §114 or §303 of the Act.



### **13. ENFORCEMENT**

The following regulations found at 310 CMR 7.02(8)(h) Table 6 for wood fuel, 7.04(9), 7.05(8), 7.09 (odor), 7.10 (noise), 7.18(1)(b), 7.21, 7.22, 7.70 and any condition(s) designated as "state only" are not federally enforceable because they are not required under the Act or under any of its applicable requirements. These regulations and conditions are not enforceable by the EPA. Citizens may seek equitable or declaratory relief to enforce these regulations and conditions pursuant to Massachusetts General Law Chapter 214, Section 7A.

All other terms and conditions contained in this permit, including any provisions designed to limit a facility's potential to emit, are enforceable by the MassDEP, EPA and citizens as defined under the Act.

A Permittee shall not claim as a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

### **14. PERMIT TERM**

This permit shall expire on the date specified on the cover page of this permit, which shall not be later than the date 5 years after issuance of this permit.

Permit expiration terminates the permittee's right to operate the facility's emission units, control equipment or associated equipment covered by this permit, unless a timely and complete renewal application is submitted at least 6 months before the expiration date.

### **15. PERMIT RENEWAL**

Upon the MassDEP's receipt of a complete and timely application for renewal, this facility may continue to operate subject to final action by the MassDEP on the renewal application.

In the event the MassDEP has not taken final action on the operating permit renewal application prior to this permit's expiration date, this permit shall remain in effect until the MassDEP takes final action on the renewal application, provided that a timely and complete renewal application has been submitted in accordance with 310 CMR 7.00: Appendix C(13).

### **16. REOPENING FOR CAUSE**

This permit may be modified, revoked, reopened, and reissued, or terminated for cause by the MassDEP and/or EPA. The responsible official of the facility may request that the MassDEP terminate the facility's operating permit for cause. The MassDEP will reopen and amend this permit in accordance with the conditions and procedures under 310 CMR 7.00: Appendix C(14).

The filing of a request by the permittee for an operating permit revision, revocation and reissuance, or termination, or a notification of a planned change or anticipated noncompliance does not stay any operating permit condition.

### **17. DUTY TO PROVIDE INFORMATION**

Upon the MassDEP's written request, the permittee shall furnish, within a reasonable time, any information necessary for determining whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the permittee shall furnish to the MassDEP copies of records that the permittee is required to retain by this permit.

## **18. DUTY TO SUPPLEMENT**

The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information. The permittee shall also provide additional information as necessary to address any requirements that become applicable to the facility after the date a complete renewal application was submitted but prior to release of a draft permit.

The permittee shall promptly, on discovery, report to the MassDEP a material error or omission in any records, reports, plans, or other documents previously provided to the MassDEP.

## **19. TRANSFER OF OWNERSHIP OR OPERATION**

This permit is not transferable by the permittee unless done in accordance with 310 CMR 7.00: Appendix C(8)(a). A change in ownership or operation control is considered an administrative permit amendment if no other change in the permit is necessary and provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between current and new permittee, has been submitted to the MassDEP.

## **20. PROPERTY RIGHTS**

This permit does not convey any property rights of any sort, or any exclusive privilege.

## **21. INSPECTION AND ENTRY**

Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized representatives of the MassDEP, and EPA to perform the following:

- (a) enter upon the permittee's premises where an operating permit source activity is located or emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- (d) Sample or monitor at reasonable times any substances or parameters for the purpose of assuring compliance with the operating permit or applicable requirements as per 310 CMR 7.00 Appendix C(3)(g)(12).

## **22. PERMIT AVAILABILITY**

The permittee shall have available at the facility, at all times, a copy of the materials listed under 310 CMR

7.00: Appendix C(10)(e) and shall provide a copy of the permit, including any amendments or attachments thereto, upon request by the MassDEP or EPA.

## **23. SEVERABILITY CLAUSE**

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

## **24. EMERGENCY CONDITIONS**

The permittee shall be shielded from enforcement action brought for noncompliance with technology based<sup>1</sup> emission limitations specified in this permit as a result of an emergency<sup>2</sup>. In order to use emergency as an affirmative defense to an action brought for noncompliance, the permittee shall demonstrate the affirmative defense through properly signed, contemporaneous operating logs, or other relevant evidence that:

- (a) an emergency occurred and that the permittee can identify the cause(s) of the emergency;
- (b) the permitted facility was at the time being properly operated;
- (c) during the period of the emergency, the permittee took all reasonable steps as expeditiously as possible, to minimize levels of emissions that exceeded the emissions standards, or other requirements in this permit; and
- (d) the permittee submitted notice of the emergency to MassDEP within two (2) business days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emission, and corrective actions taken.

If an emergency episode requires immediate notification to the Bureau of Waste Site Cleanup/Emergency Response immediate notification to the appropriate parties should be made as required by law.

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<sup>1</sup> Technology based emission limits are those established on the basis of emission reductions achievable with various control measures or process changes (e.g., a new source performance standard) rather than those established to attain health based air quality standards.

<sup>2</sup> An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation would require immediate corrective action to restore normal operation, and that causes the source to exceed a technology based limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operations, operator error or decision to keep operating despite knowledge of any of these things.

## **25. PERMIT DEVIATION**

Deviations are instances where any permit condition is violated and not reported as an emergency pursuant to Section 24 of this permit. Reporting a permit deviation is not an affirmative defense for action brought for noncompliance. Any reporting requirements listed in Table 6 of this Operating Permit shall supersede the following deviation reporting requirements, if applicable.

The Permittee shall report to the MassDEP's Regional Bureau of Waste Prevention the following deviations from permit requirements, by telephone or fax, within three (3) days of discovery of such deviation:

- Unpermitted pollutant releases, excess emissions or opacity exceedances measured directly by CEMS/COMS, by EPA reference methods or by other credible evidence, which are ten percent (10%) or more above the emission limit.
- Exceedances of parameter limits established by your Operating Permit or other approvals, where the parameter limit is identified by the permit or approval as surrogate for an emission limit.
- Exceedances of permit operational limitations directly correlated to excess emissions.
- Failure to capture valid emissions or opacity monitoring data or to maintain monitoring equipment as required by statutes, regulations, your Operating Permit, or other approvals.
- Failure to perform QA/QC measures as required by your Operating Permit or other approvals for instruments that directly monitor compliance.

For all other deviations, three (3) day notification is waived and is satisfied by the documentation required in the subsequent Semi-Annual Monitoring Summary and Certification. Instructions and forms for reporting deviations are found in the Massachusetts MassDEP of Environmental Protection Bureau of Waste Prevention Air Operating Permit Reporting Kit, which is available to the Permittee via the MassDEP's web site, <http://www.mass.gov/dep/air/approvals/aqforms.htm#op>.

This report shall include the deviation, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and the corrective actions or preventative measures taken.

Deviations that were reported by telephone or fax within 3 days of discovery, said deviations shall also be submitted in writing via the Operating Permit Deviation Report to the regional Bureau of Waste Prevention within ten (10) days of discovery. For deviations, which do not require 3-day verbal notification, follow-up reporting requirements are satisfied by the documentation required in the aforementioned Semi-Annual Monitoring Summary and Certification.

## **26. OPERATIONAL FLEXIBILITY**

The permittee is allowed to make changes at the facility consistent with 42 U.S.C. §7401, §502(b)(10) not specifically prohibited by the permit and in compliance with all applicable requirements provided the permittee gives the EPA and the MassDEP written notice fifteen days prior to said change; notification is not required for exempt activities listed at 310 CMR 7.00: Appendix C(5)(h) and (i). The notice shall comply with the requirements stated at 310 CMR 7.00: Appendix C(7)(a) and will be appended to the facility's permit. The permit shield allowed for at 310 CMR 7.00: Appendix C(12) shall not apply to these changes.

## **27. MODIFICATIONS**

(a) Administrative Amendments - The permittee may make changes at the facility which are considered administrative amendments pursuant to 310 CMR 7.00: Appendix C(8)(a)1., provided they comply with the requirements established at 310 CMR 7.00: Appendix C(8)(b).

(b) Minor Modifications - The permittee may make changes at the facility which are considered minor modifications pursuant to 310 CMR 7.00: Appendix C(8)(a)2., provided they comply with the requirements established at 310 CMR 7.00: Appendix C(8)(d).

(c) Significant Modifications - The permittee may make changes at the facility which are considered significant modifications pursuant to 310 CMR 7.00: Appendix C(8)(a)3., provided they comply with the requirements established at 310 CMR 7.00: Appendix C(8)(c).

(d) No permit revision shall be required, under any approved economic incentives program, marketable permits program, emission trading program and other similar programs or processes, for changes that are provided in this operating permit. A revision to the permit is not required for increases in emissions that are authorized by allowances acquired pursuant to the Acid Rain Program under Title IV of the Act, provided that such increases do not require an operating permit revision under any other applicable requirement.

## **APPEAL CONDITIONS FOR OPERATING PERMIT**

This permit is an action of MassDEP. If you are aggrieved by this action, you may request an adjudicatory hearing within 21 days of issuance of this permit. In addition, any person who participates in any public participation process required by the Federal Clean Air Act, 42 U.S.C. §7401, §502(b)(6) or under 310 CMR 7.00: Appendix C(6), with respect to MassDEP's final action on operating permits governing air emissions, and who has standing to sue with respect to the matter pursuant to federal constitutional law, may initiate an adjudicatory hearing pursuant to Chapter 30A, and may obtain judicial review, pursuant to Chapter 30A, of a final decision therein.

If an adjudicatory hearing is requested, the facility must continue to comply with all existing federal and state applicable requirements to which the facility is currently subject, until a final decision is issued in the case or the appeal is withdrawn. During this period, the application shield shall remain in effect, and the facility shall not be in violation of the Act for operating without a permit.

Under 310 CMR 1.01(6)(b), the request must state clearly and concisely the facts which are the grounds for the request, and the relief sought. Additionally, the request must state why the permit is not consistent with applicable laws and regulations.

The hearing request along with a valid check payable to The Commonwealth of Massachusetts in the amount of one hundred dollars (\$100.00) must be mailed to:

The Commonwealth of Massachusetts  
Department of Environmental Protection  
P.O. Box 4062  
Boston, MA 02211

The request will be dismissed if the filing fee is not paid unless the appellant is exempt or granted a waiver as described below.

The filing fee is not required if the appellant is a city or town (or municipal agency) county, or district of the Commonwealth of Massachusetts, or a municipal housing authority.

MassDEP may waive the adjudicatory hearing filing fee for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file, together with the hearing request as provided above, an affidavit setting forth the facts believed to support the claim of undue financial hardship.

## **28. LEGEND OF ABBREVIATED TERMS IN OPERATING PERMIT \***

\*Not all abbreviations are present in every Operating Permit

AOS – Alternative Operating Scenario  
AQCR - Air Quality Control Region  
AST – Aboveground Storage Tank  
Be – Beryllium  
BTU – British Thermal Unit  
CARB – California Air Resources Board  
CEM - Continuous Emission Monitor  
CFR – Code of Federal Regulations  
CGA – cylinder gas audit  
CO - Carbon Monoxide  
DAHS – Data Acquisition Handling System, the electronic system utilized to monitor and record parameters  
DIFF – Differential  
DMS – dimethyl sulfide (CAS No. 75-18-3, EC No. 200-846-2)  
EPA - Environmental Protection Agency  
FMF FAC. NO. - Facility Master File Number  
F – Fahrenheit  
FMF RO NO. - Facility Master File Regulated Object Number  
FPS – feet per second  
FT<sup>3</sup>/day - Cubic Feet Per Day  
gr/dscf – grains per dry standard cubic foot  
H<sub>2</sub>S – hydrogen sulfide (CAS No. 7783-06-4, EC No. 23-977-31)  
HAPs – Hazardous Air Pollutants  
Hg - Mercury  
HR – hour  
ISO – Represents 59°F, 60% Relative Humidity, 29.92 Inches Mercury At Sea Level  
MassDEP - Massachusetts Department of Environmental Protection  
Min – minimum  
MMBTU/hr - Million British Thermal Units Per Hour - 1,000,000 BTU Per Hour  
NH<sub>3</sub> - Ammonia  
NO<sub>x</sub> - Nitrogen Oxides  
NSPS – New Source Performance Standard  
O<sub>2</sub> – oxygen  
OL – Organic Liquid  
Pb - Lead  
PLT ID - Plant Identification  
PM - Particulate Matter  
PPM - Parts Per Million  
ppmvd – parts per million by volume in the dry gas  
PTE - Potential To Emit  
RATA – Relative Accuracy Test Audit  
RTO – Regenerative Thermal Oxidizer  
SCADA – Supervisory Control and Data Acquisition, the electronic system utilized to monitor parameters  
SCFM – standard cubic feet per minute  
SO<sub>2</sub> - Sulfur Dioxide  
SSEIS - Stationary Source Emission Inventory System  
TEMP - Temperature  
TPY - Tons Per Year  
ug/m<sup>3</sup> – micrograms per cubic meter  
UBWPAD – Upper Blackstone Water Pollution Abatement District

VOC - Volatile Organic Compound